NUTRIENT TMDLS AND 303(D) LISITNGS

AN NNMT PRESENTATION

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OWOW

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The Lower Illinois River
USACE Photo

Today's Agenda

- Status of nutrient impaired waters and TMDLs.
- State nutrient priorities for Impaired Waters and TMDL Vision.
- Nutrient related impairment assessments, list and TMDL litigation and controversial issues.

NUTRIENTS: A TOP CAUSE OF IMPAIRMENT

Impaired Miles of Rivers and Streams

- 21% Nutrients/organic enrichment/oxygen depletion
- 16% Pathogens
- 13% Sediment
- 9% Temperature
- 8% Metals, other than Hg

Impaired Acres of Lakes and Reservoirs

- 45% Mercury
- 34% Nutrients/organic enrichment/oxygen depletion
- 17% PCBs
- 8% Turbidity
- 7% Metals, other than Hg

For purposes of presenting State information in ATTAINS, EPA compiles State reported impairments into national category groups, and as such, EPA defines "nutrient-related" as impairments that fall under the following parent category groups: nutrients, organic enrichment/oxygen depletion, ammonia, algal growth, and noxious aquatic plants.

Disclaimer: Impairment information as of October, 2017. Because data are being migrated to the new ATTAINS system, these numbers may not reflect most current information.

NUTRIENT OR NUTRIENT-RELATED TMDLS APPROVED OR ESTABLISHED

21 ,648 Mercury

14,168 Pathogens

10,387 Metals, other than Hg

9,019 Nutrients/organic enrichment/oxygen depletion/algal growth

4,031 Sediment

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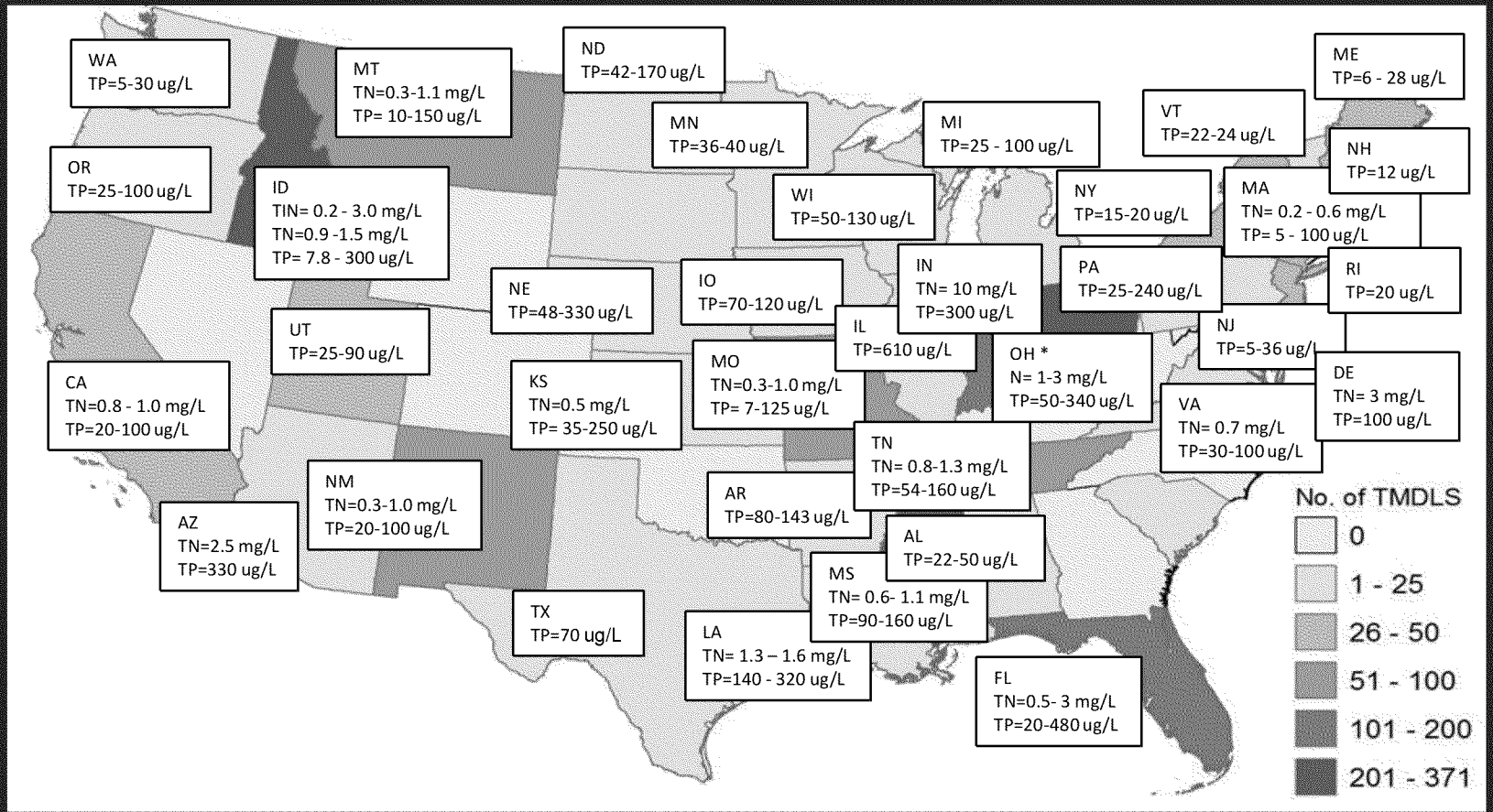
INTERPRETING NARRATIVE CRITERIA: RANGE OF TN/TP ENPOINTS IN TMDLS



NUTRIENT RELATED VISION PRIORITIES

Priority Waters for Nutrient TMDLs or Alternative Plans	# States
Identified at least one nutrient impaired waterbody	46
Identified nutrient impaired lakes	26
Identified nutrient impaired rivers or streams	32
Did not identify any waterbodies that are nutrient impaired	5
Identified nutrient impaired waterbody for protection plan	10
Protection plans for nutrient impaired waterbody accepted by EPA	2
Alternative TMDL addressing nutrient impaired water accepted by EPA	6

POTENTIAL BENEFITS OF 303(D) PROGRAM TO ADDRESS NUTRIENTS

- Interpreting narratives in listing, TMDLs
- Engage stakeholders with models and other science to understand WQ condition, and ID sources, solutions.
- Develop WLA, including for stormwater.
- Develop LA, include reasonable assurance.
- Promote cooperation among governments.

NUTRIENTS IN EPA'S INTEGRATED REPORTING GUIDANCE

2014

- Lack of numeric criteria, assessment methodology, or monitoring data are insufficient reasons not to assess for nitrogen of phosphorus impairment
- Provided examples of assessment approaches from 6 states
- Encouraged interpretation of narrative criteria
  - Visual assessments –
    - excess plant growth: algae, macrophytes, slime
    - diminished plant growth: eelgrass, native vegetation, proliferation of exotic species
  - Develop targets/thresholds to translate narrative
  - Use of nutrient-related parameters: DO, pH, chlorophyll-*a*, biota

2016

- Reiterated identification of nutrient impairments remains a priority
- Encouraged states to share methodologies

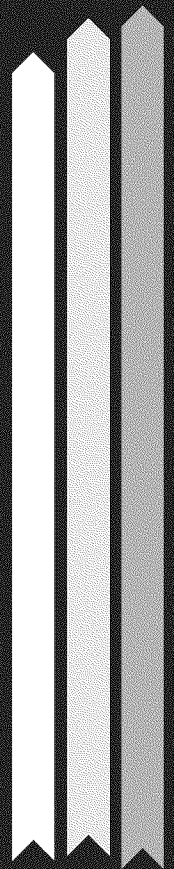
Nutrient-Related Listing Issues

Listing Litigation

- Shenandoah River, Virginia
- Western basin of Lake Erie, Ohio
- Tidal tributaries in Chesapeake Bay, Maryland

Other Controversial Listing Issues

- Great Bay, New Hampshire
- Multiple Segments, Illinois
- Gulf of Mexico/Coastal, LA
- Farmington Bay of Great Salt Lake, UT



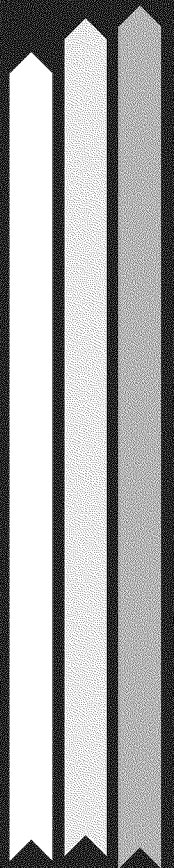
Nutrient-related TMDL issues

Litigation

- Indian Creek & Goose Creek, PA
- James River, Chesapeake Bay, VA
- Buffalo Ditch and Piper Creek, MO

Other Controversial TMDL Issues

- Long Island Sound, CT
- Illinois River & Lake Tenkiller, OK, AR



THE IMPORTANCE OF PARTNERSHIPS

A Collaborative Effort

COLLABORATION EXAMPLE: ILLINOIS RIVER, AR & OK

A multi-year process

- 2009 NPDES permit issued to AR
- 2010 Principles Group formed
- 2010-2015 deliberative and extensive model development
- 2015 Peer review, State and Tribal review, Public meetings
- 2017 States collect and evaluate stakeholder comments
- 2018 Model finalized

Focus on engagement

- AR: DEQ, WRB, NRC
- Univ. of AR
- OK: DEQ, WRB, Conservation Cmte., Dept. of Ag.

Active Stakeholders

- Ag. Livestock industry (chicken, hogs)
- Save the Illinois River
- NW AR Regional Planning Commission
  - Municipalities
  - POTWs

Illinois River, Cherokee County, Low Water at Combs Bridge
Ed Brocksmith photo

QUESTIONS